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Steven R. Pearson

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EXAMINER

FILIPCZYK, MARCIN R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/960,118	Applicant(s) PEARSON, STEVEN R.	
	Examiner Marc R. Filipczyk	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008 and 19 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Response to Amendment

This Action is responsive to Applicant's amendment filed on May 19, 2008.

Claim 15-32 are pending.

To expedite the process of examination Examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. amendments, 35 U.S.C. 112, objections and the like) set forth by the Examiner that Applicants provide and link to the most specific page and line numbers of the disclosure where the best support is found (see 35 U.S.C. 132).

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 19, 2008 has been entered.

Claim Objections

Claims 15-32 are objected to because of the following informalities:

The phrase "hierarchical node" is objected to and should be replaced with a node pertaining to a particular level to reflect similar terminology used throughout the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth whether the invention accomplishes a practical application and whether it generates a useful, concrete and tangible result.

The guidelines explain that a practical application of a 35 U.S.C. 101 judicial exception is claimed if the claimed invention physically transforms an article or physical object to a different state or thing, or if the claimed invention otherwise produces a useful, concrete, and tangible result.

In the present case, independent claims 15, 21 and 27 do not involve transformation of article or physical object to a different state or thing, they merely recite processing data items. Further, independent claims 15, 21 and 27 do not produce a useful, concrete, and tangible result, but merely attempt to merge data of multiple streams to a single output, however this feature is not clearly claimed hence the claim is nonfunctional. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02.

Claims 15, 21 and 27 taken as a whole are directed to a mere method and program listing, i.e., to only its description or expression, is descriptive material per se, do not comprise a practical application as explained above hence are nonstatutory.

Since the claimed invention, as a whole, does not comprise a practical application as explained above, claims 16-20, 22-26 and 28-32 which depend from claims 15, 21 and 27 respectively, are deemed to be directed to non-statutory subject matter.

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Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15, 21 and 27, claim 15 being exemplary, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 15 being exemplary, the subject matter of 1) “promoting said data items of said leaf nodes through said tree from a leaf node to said root node” and 2) “promoting one of said data items of one said nodes to a node in a next level”, were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claims 16-20, 22-26, 28-32 depend from claims 15, 21 and 27, respectively and are therefore rejected on the same basis.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 15-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 15, 21 and 27, claim 15 being exemplary, the segment “promoting one of said data items of one said nodes to a node in a next level... status identifier” is indefinite. It is not clear how a status identifier is used to promote nodes from one level to another level. It is further not clear which node is promoted to what. Second, the segment “comparing said status identifier of two of said nodes” is indefinite. It is not clear what status and which two nodes are compared. The phrase, “said first node” is indefinite. It is not clear what node is being referred to. The segment “a next time” is indefinite. It is not clear what is claimed. The phrase “a next level” is indefinite. While level is well understood in the art of node trees, it is not clear what level is the next level.

Claims 16-20, 22-26, 28-32 depend from claims 15, 21 and 27, respectively and are therefore rejected on the same basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 15-32 are rejected under 35 U.S.C. 102(a) as best as Examiner is able to ascertain as being anticipated by Applicant’s Admitted Prior Art (AAPA), Applicant’s Disclosure.

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Regarding claims 15, 21 and 27, AAPA discloses a method, program and system for implementing replacement selection method: (page 1, lines 5-8 and page2, lines 11-15, AAPA)

creating a tree with a root node and leaf nodes; (fig. 5A, items 520-525 and see nodes)

processing data items; (fig. 5A)

promoting data items responsive to a data identifier value; (fig. 5A, items 520-525 and 510-515)

merging data items from input streams to a single output stream; (fig. 5A and page 1, par. 5, lines 1-11)

resolving a data item being processed from a second input stream as being a duplicate of a previously processed data item from a first input stream using a status identifier based on said assigned duplicate data item comparison and omitting a node identifier comparison; (fig. 5A, nodes and page 1, par. 6, lines 1-7, *duplicate and swap can be omitted*)

processing and promoting data items from said second input stream responsive to said assigned duplicate status identifier (page 1, par. 5, lines 8-11 and par 6, line 4); and

said single output stream comprised of said merged data items (fig. 5A and page 1, par. 5, lines 1-11, *merging*).

(Note: AAPA teaches any number of input streams represented by the letter N)

Regarding claims 16-20, 22-26 and 28-32 AAPA discloses all the subject matter claimed in the rejection above, in addition AAPA teaches each node of the selection tree comprises an identifier of one of the input streams, and a reference to a data item being processed from that one of the input streams (fig. 5A, item 500 and nodes), value numbers to signify relationships

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between the keys (identifiers), see (page 1, par. 6, lines 5-8) and that the method is a replacement selection method using a loser oriented selection tree (fig. 5 and page 1, paragraphs 5 and 6).

Response to Arguments

Applicant's arguments filed May 19, 2008 have been fully considered but they are not persuasive. The arguments and responses are listed below.

On page 8, Applicant argues that "hierarchical node" is replaced to "next higher level in the tree structure".

Examiner disagrees. A next level is indefinite because it is not clear what particular node is being promoted to what particular level and node in the tree structure.

On page 9, Applicant argues that the feature of "single output stream formed by the merge" overcomes non-statutory rejection.

Examiner disagrees. Applicants do not successfully claim deriving a single output stream from multiple streams and the rejections therefore are maintained.

On pages 9 and 10, Applicant argues that 112 rejections should be removed since examiner provided only a blanket statement.

Examiner disagrees. Applicants do not successfully claim deriving a single output stream from multiple streams. The implementation and traversal of nodes and use of identifiers is not clearly claimed and is therefore rejected as best understood. Every rejection follows with an

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explanation and reasoning of why the subject matter is indefinite. In retrospect, Applicant did not provide any full explanation or specific reference to the specification for possible clarification or support of the claimed subject matter.

On page 11, Applicant argues that the prior art does not teach the omission of a second node identifier comparison but teaches omission using swap, hence “after the key comparison”.

Examiner disagrees. Examiner notes that the present claims are rejected as best understood by the Examiner. The pending claims attempt to claim a computer replacement selection method for 3 or more input data streams, or a plurality of streams. The AAPA submitted by the Applicants also teaches a computer replacement selection method by building a binary selection tree over a plurality of input streams, as seen in fig. 5 (page 1, lines 5-8 and 9-11, Instant Application). The claimed limitations include comparing status identifiers which is also done by the prior art using relationships “-1, 0 or 1” between the compared keys as described in par. 6 on page 1 of the specification.

With respect to all the pending claims 15-32, Examiner respectfully traverses Applicants assertion based on the discussion and rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali can be reached on 571-272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF

August 25, 2008

/Marc R Filipczyk/

Examiner, Art Unit 2169

/Mohammad Ali/

Supervisory Patent Examiner, Art Unit 2169